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# (12) UK Patent Application (19) GB (11) 2 155 291 A

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GB 1206447  
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## (54) Improved fishing tackle

(57) There is disclosed a fishing rod comprising a first section (31), a second section (1) comprising a fluid compression chamber, and a third section (8) connecting the two other sections and comprising an elongate hollow tube connected to the chamber (1) by a valve (7). A sinker (13) may be placed in the tube (8), the valve (7) opened, having first compressed air in chamber (1), whereby the sinker (13) and fishing line are propelled large distances seawardly.

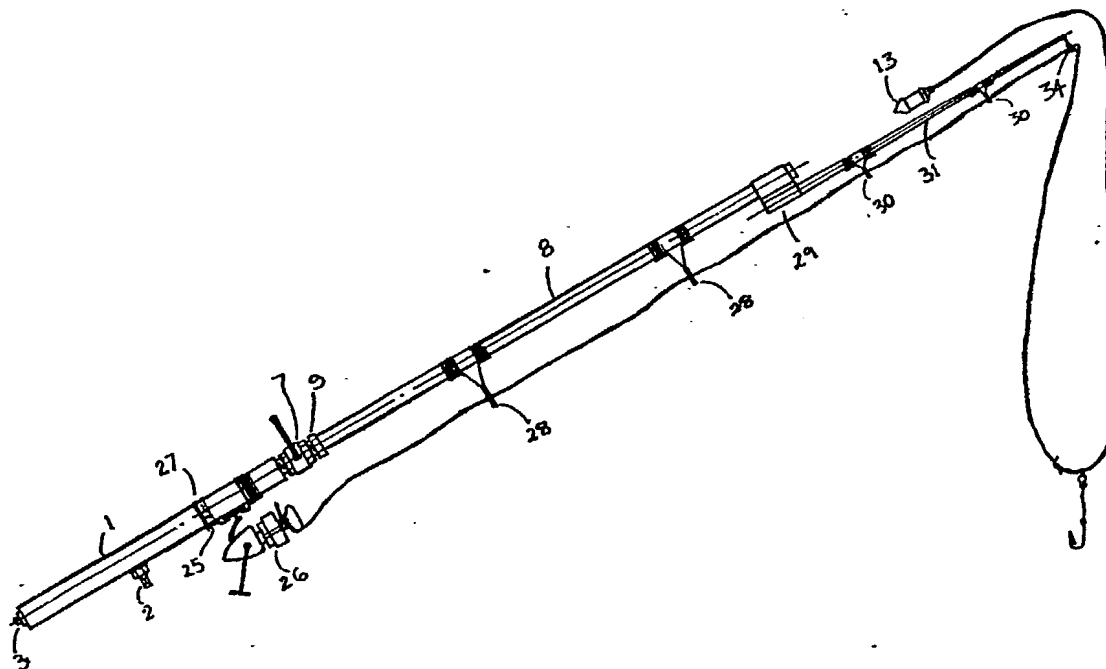
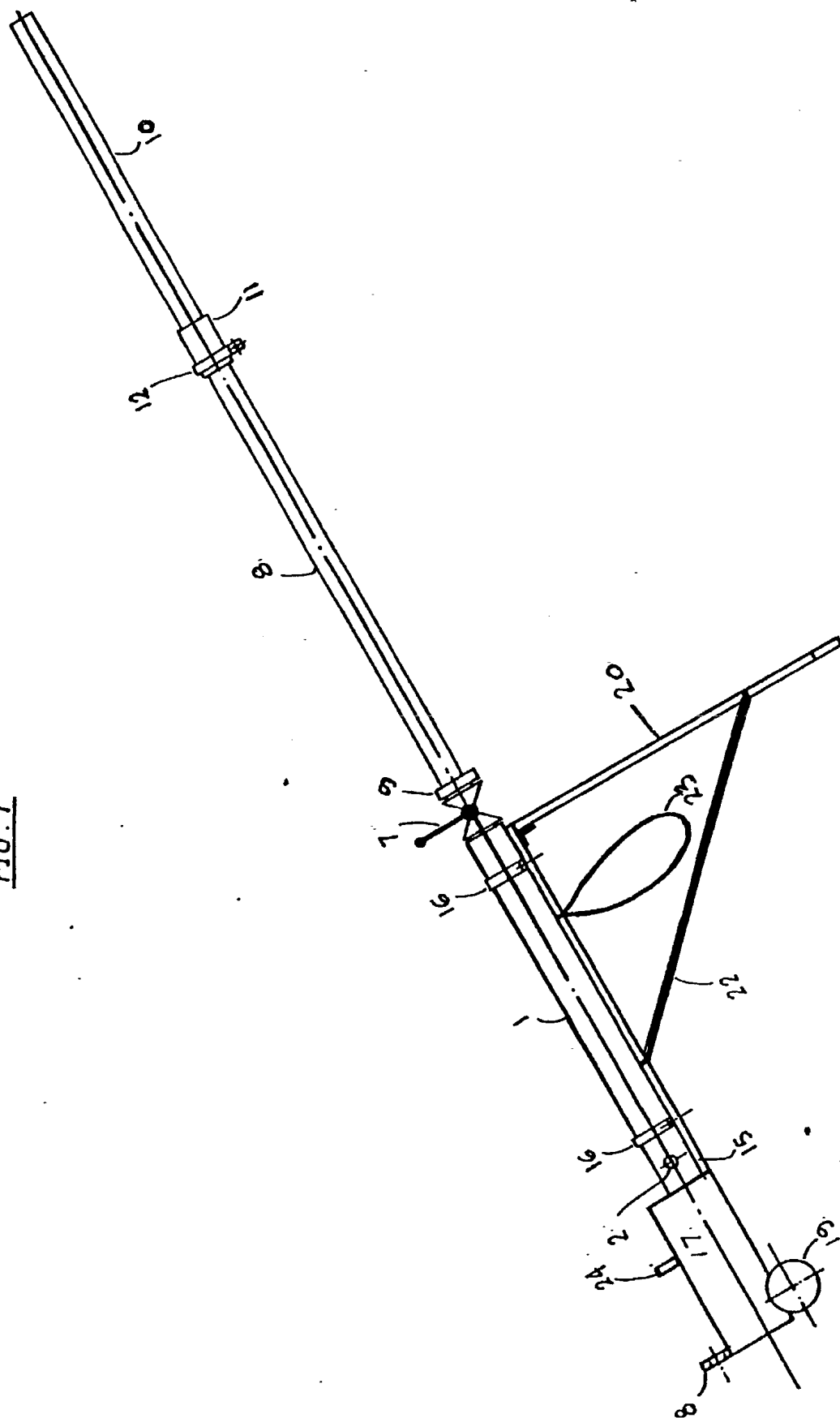
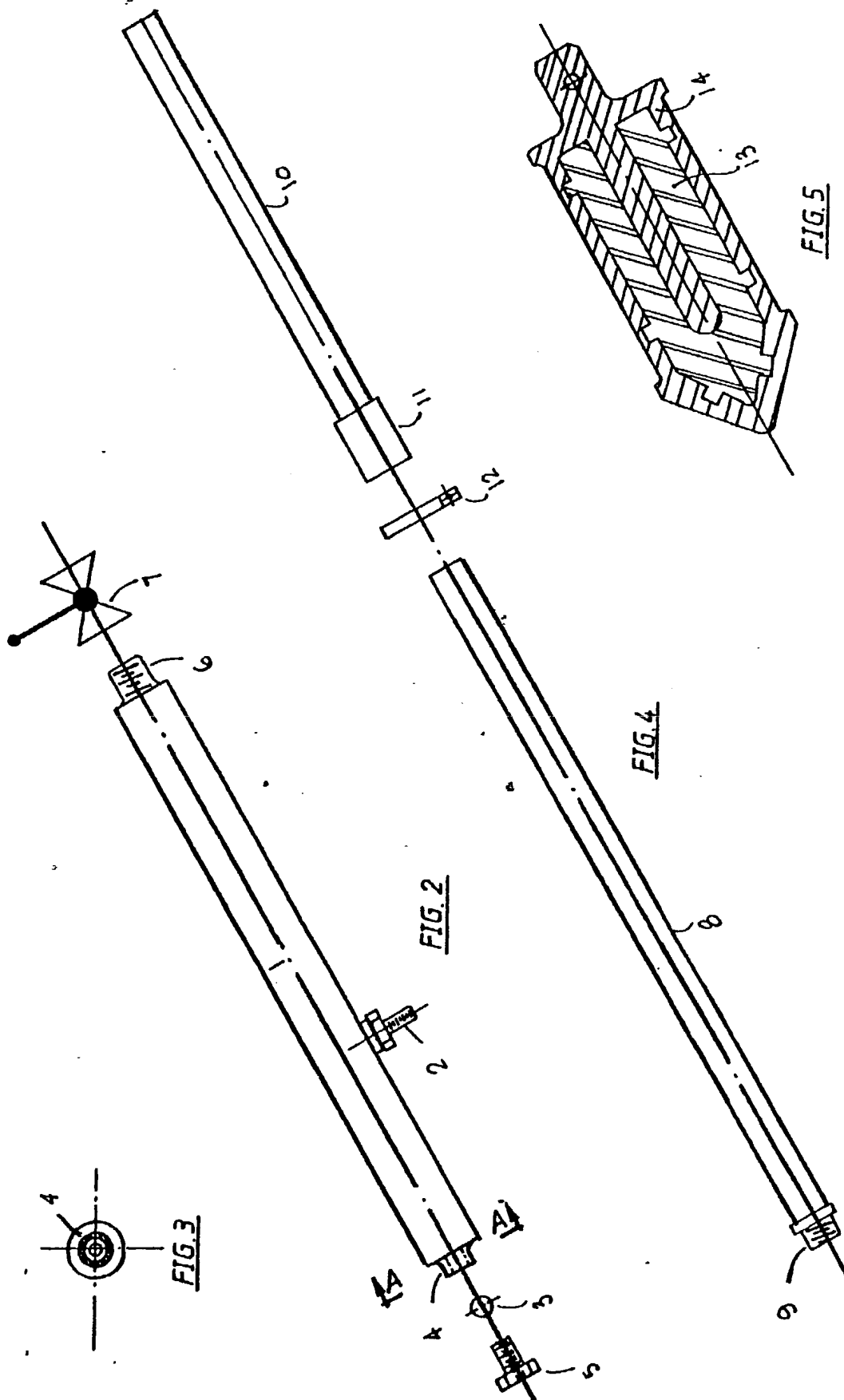


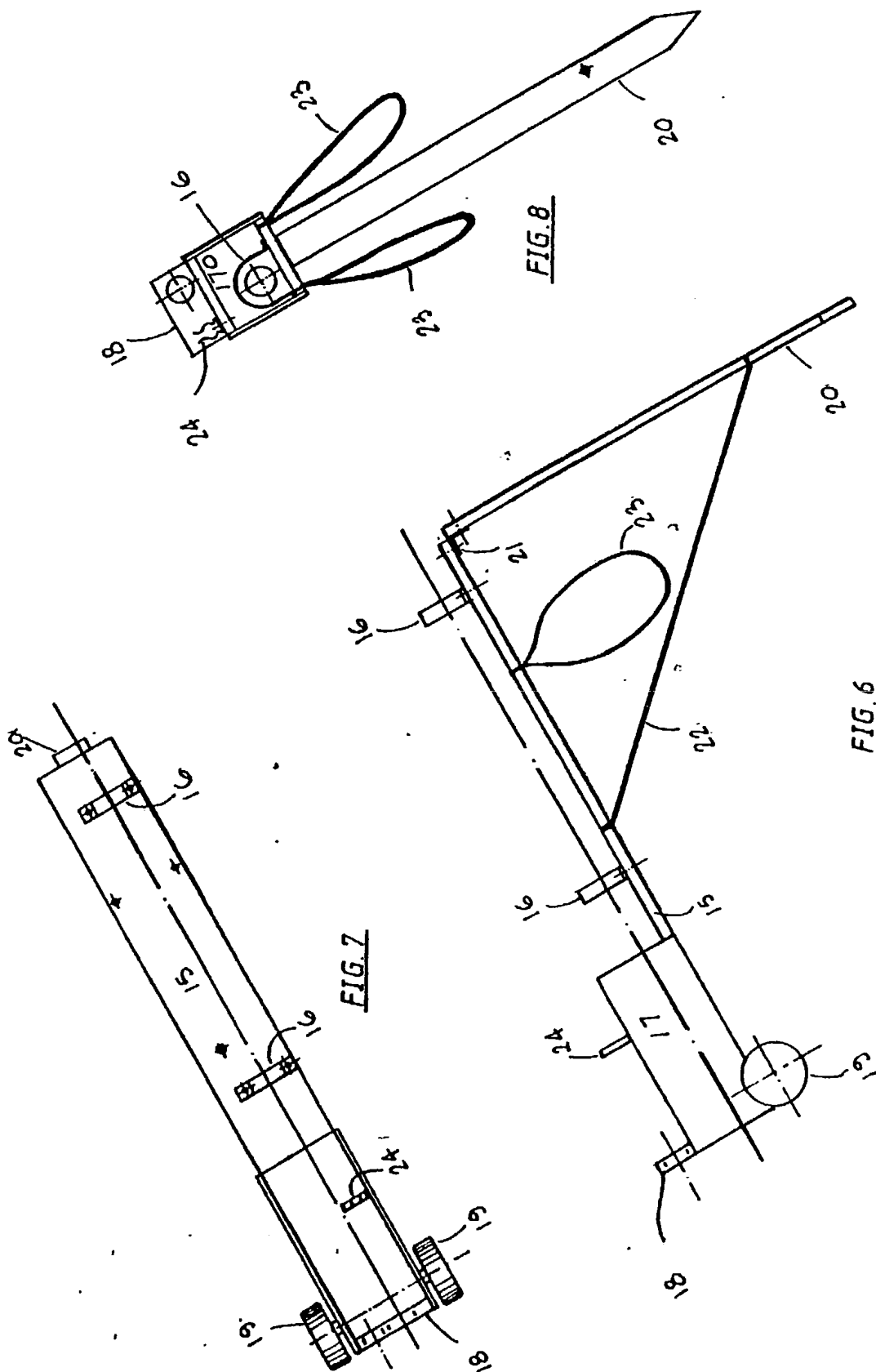
FIG. 9

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FIG. 1







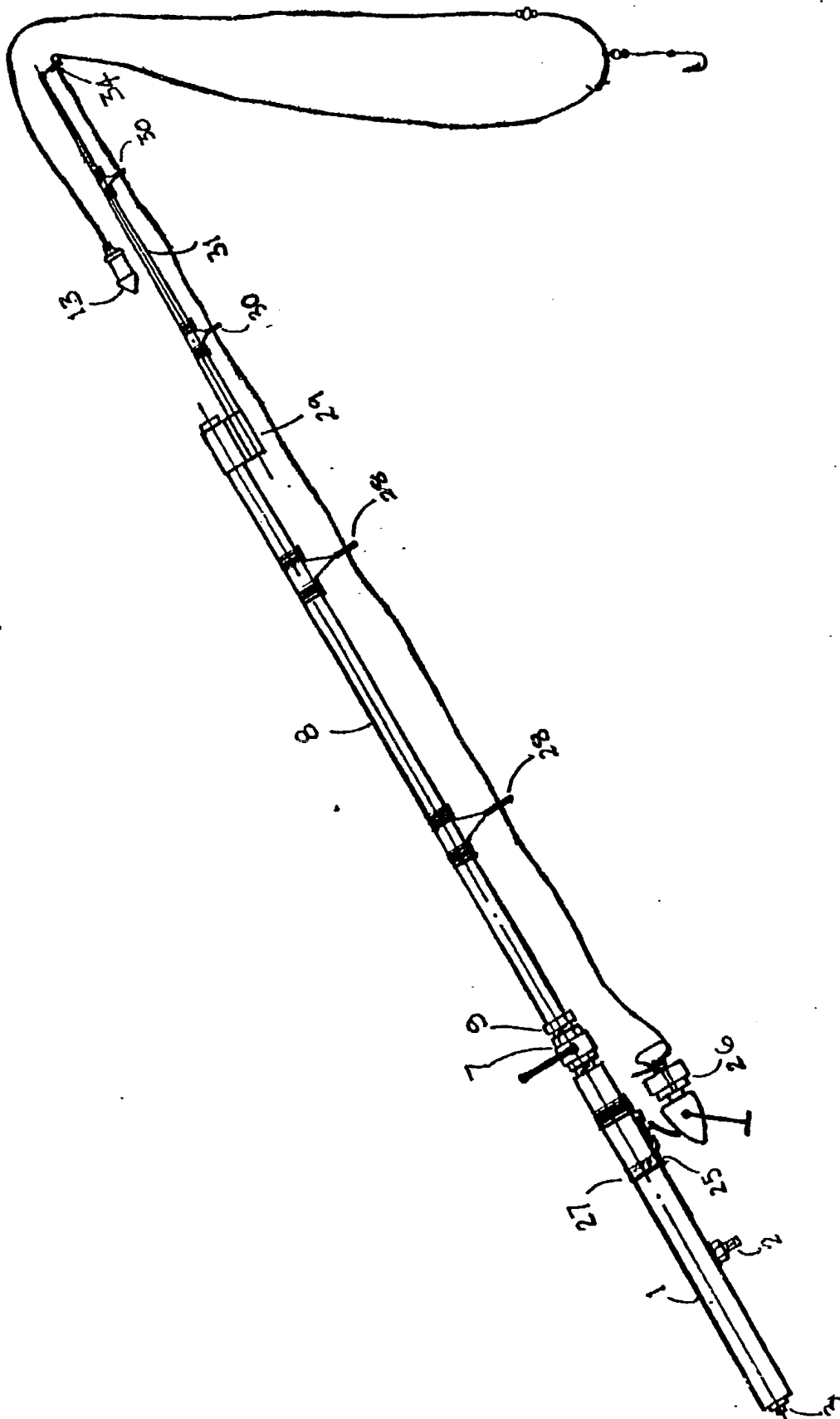
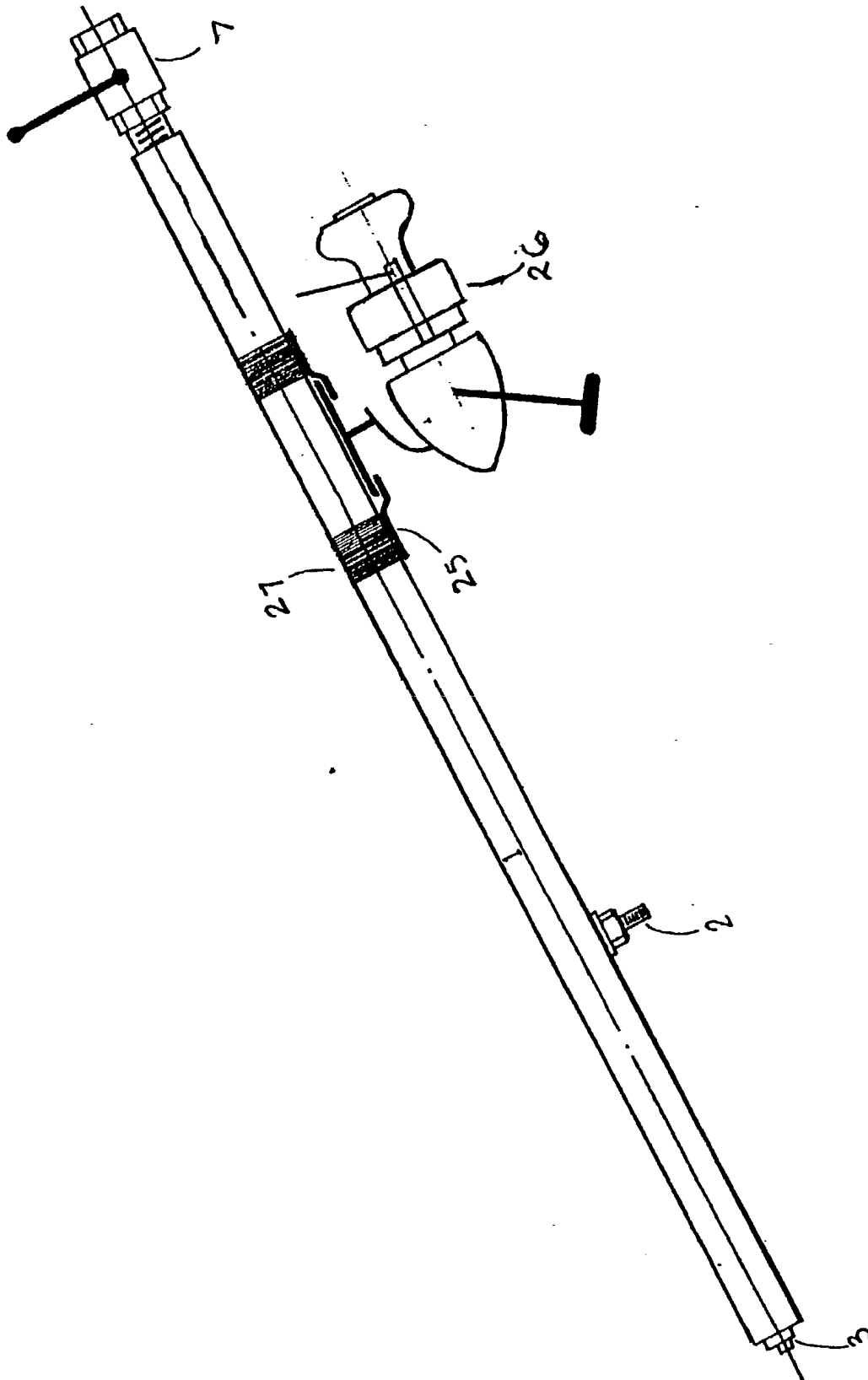


FIG. 9

FIG. 10

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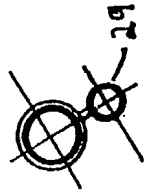


FIG. 12

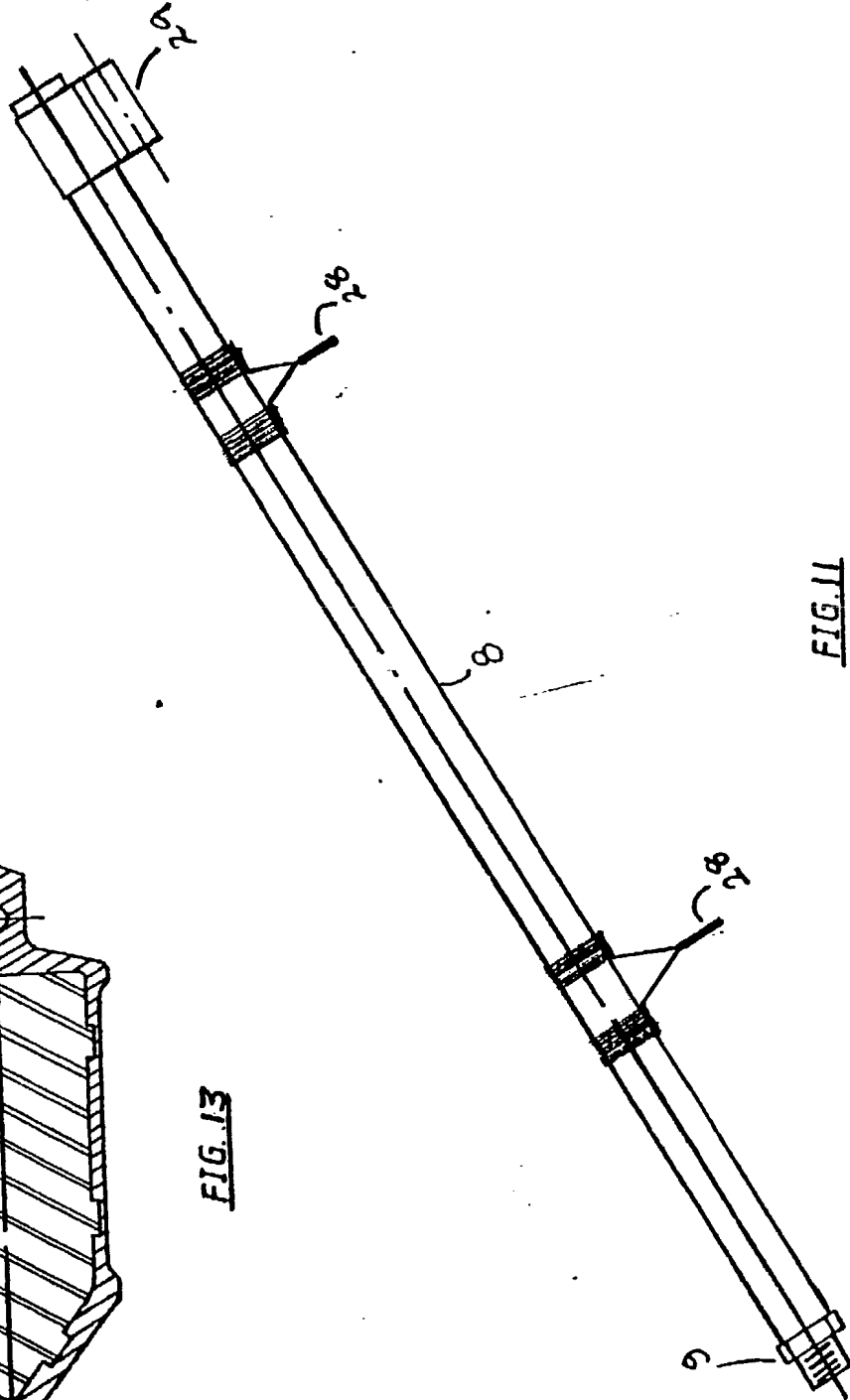


FIG. 11

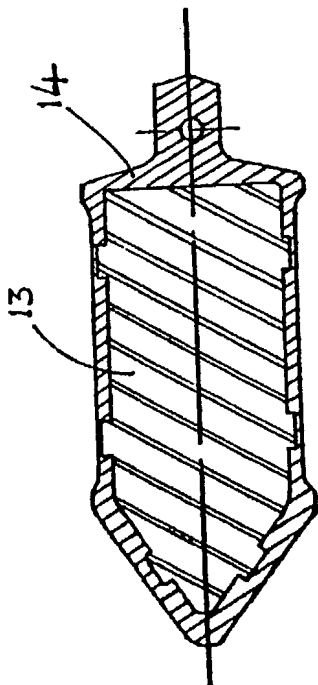


FIG. 13



## SPECIFICATION

## Improved fishing tackle

5 The present invention relates to improved fishing tackle and more particularly to such tackle incorporating a mechanical device to cast a surf fishing line as far away from the beach as possible. The mechanical device may be integral with the fishing  
10 rod or separate therefrom.

An average person can cast a distance of approximately 70 yards. However it is often desired to catch fish which are further than this distance from the shore.

15 The object of this invention is to provide fishing tackle enabling an average user to launch a surf fishing line a distance further than that which could be achieved by hand tossing of a fishing rod.

According to the present invention there is provided a fishing rod comprising a first section disposed remote from a user of the rod and adapted to sense fish bite, a second section disposed adjacent said user and comprising a chamber into which fluid can be compressed, and a third section  
20 disposed to connect said first and second sections and comprising an elongate hollow tube connected to said chamber by a valve means.

Preferably fishing reel means are fixed to the second section and sinker means are connected by  
30 thread to the reel and are dimensioned to fit closely into the elongate hollow tube which is of substantially constant internal diameter.

The preferred fluid is air. The sinker means if preferably lead covered with plastics material. Advantageously the plastics material is so moulded  
35 as to have at least one integral sealing ring about its periphery.

Embodiments of the invention will now be more particularly described by way of example and with  
40 reference to the accompanying drawings, in which:

*Figure 1* is a side elevation of the mechanical device separate from a fishing rod;

*Figure 2* is a detail in separated condition of an air pressure tube of the device of *Figure 1*;

45 *Figure 3* is an end view of the air pressure tube of *Figure 2*;

*Figure 4* is a detail of an acceleration barrel of the device of *Figure 1*;

*Figure 5* is a cross section view through a sinker  
50 used with the device;

*Figure 6* is a side elevation of a housing of the device of *Figure 1*;

*Figure 7* is a top view of the housing;

*Figure 8* is a front view of the housing;

55 *Figure 9* is a side elevation of the mechanical device integral with a fishing rod;

*Figure 10* is a detailed view of an air chamber of the fishing rod of *Figure 9*;

*Figure 11* is a view of a launching barrel of the  
60 fishing rod of *Figure 9*;

*Figure 12* is a top view of the launching barrel; and

*Figure 13* is a cross section through an alternative form of sinker.

65 Referring now to the drawings, there is shown in

*Figures 9 to 13* an embodiment of this invention which consists of the major components: an air pressure tube; and acceleration barrel; a specially designed sinker; and a fishing rod and its conventional appurtenances. In the embodiment of *Figures 1 to 8* the fishing rod is separated and a housing for the device is provided.

70 Air is compressed into the air pressure tube 1 through a tubeless tyre valve 2 using an ordinary hand, foot or car battery operated tyre pump. Normal operating pressure is between 0 Kpa and 1000 Kpa.

80 The bottom end of the air pressure tube consists of an overpressure rupture disc 3 which is sandwiched between the threaded socket 4 and the threaded bush 5. The threaded bush 5 has a centre hole as the air escape in case the rupture disc 3 bursts because of overpressure in the tube 1.

85 The top end of the air pressure tube consists of a male threaded bush 6 which is connected to the low torque 90 degree turn valve 7.

In the embodiment shown in *Figures 1 to 8*, the air pressure tube is secured to a housing by two U-clamps 16.

90 In the embodiment shown in *Figures 9 to 13*, an ordinary fishing reel 26 is secured onto the air chamber by a winch 25 which is in turn fixed onto the pipe 1 by a thread 27.

95 The acceleration barrel is of uniform internal diameter and consists of a lower section 8 and an upper section 10. The lower section 8 has a male threaded bush 9 and is connected to the other end of the 90 degree turn valve 7.

100 The two sections of the acceleration barrel are joined together by a short sleeve 11 and clamped tightly together by a clamp 12.

If it is desired to cast shorter distances, then only the lower section 8 need be used instead of the two sections joined together.

105 The two-sectioned acceleration barrel can easily be disassembled and stored in the housing when it is not used. The disassembly is then small enough to be placed inside the boot of a car.

110 In the embodiment of *Figures 9 to 13*, the barrel is provided with a joiner 29. The joiner 29 joins the barrel and a tapered top section 31 together.

The tapered top section 31 consists of a tapered fibreglass rod to which are affixed fishing line runners 30 and an end runner 34.

115 The sinker consists of a heavy metal (e.g. lead) core 13 and plastics enclosure 14. The plastics enclosure 14 is shaped to have two shoulders in order to minimise the friction as it is being accelerated through the acceleration barrel, but to keep the sinker centred in the barrel.

120 Optimum weights of the sinker are between 280 grams and 380 grams.

125 The sinker 13, 14 and the acceleration barrel 8 require there to be used lubricants such as tuna oil, vegetable oil or engine oil for better performance.

The air pressure tube 1 may be fixed onto a support base 15 by two U-clamps 16. The support base 15 and a box 17 provide storage space for the two sections of the acceleration barrel.

An upper hole of an end plate 18 provides support for a separable fishing rod and a lower hole of the end plate 18 makes room for the threaded bush 5.

- 5 Two wheels 19 are provided to make trolleying easier. Two shoulder-straps 23 are provided for alternative carriage on one's shoulders.

A front support leg 20 helps set the optimum cast angle between 26 degrees and 30 degrees from the horizontal. With the help of a hinge 21 and a tension rope 22, the front support leg 20 can be folded to touch the support base 15.

An ordinary hand operated tyre pump can be secured in position by a clip 24.

- 15 Using the improved fishing tackle embodying the present invention, even an average fisherman can easily cast a distance of more than 200 yards.

#### CLAIMS

20

1. A fishing rod comprising a first section disposed remote from a user of the rod and adapted to sense fish bite, a second section disposed adjacent said user and comprising a chamber into which fluid can be compressed, and a third section disposed to connect said first and second sections and comprising an elongate hollow tube connected to said chamber by valve means.

- 25 which fluid can be compressed, and a third section disposed to connect said first and second sections and comprising an elongate hollow tube connected to said chamber by valve means.
2. A fishing rod as claimed in claim 1 in which said elongate hollow tube is of substantially constant internal diameter.

3. A fishing rod as claimed in claim 2 wherein reel means are affixed to said second section, and sinker means are connected by a thread to the reel and are dimensioned to fit closely into the elongate hollow tube.

4. A fishing rod as claimed in claim 3, wherein the sinker means comprise a weight about which is so moulded plastics material that at least one integral sealing ring extends around the periphery of the sinker means.

5. A fishing rod as claimed in claim 1 and substantially as described herein with reference to the accompanying drawings.

- 45 6. A fishing rod substantially as described herein with reference to either Figure 5 or Figure 13 of the accompanying drawings.